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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,874	02/27/2004	Darrell L. Wertz	18136	7116

7590 10/13/2005
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EXAMINER

ZARROLI, MICHAEL C

ART UNIT	PAPER NUMBER
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2839

DATE MAILED: 10/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/788,874

Applicant(s)

WERTZ ET AL.

Examiner

Michael C. Zarroli

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-15, 17 and 18 is/are rejected.
- 7) ☒ Claim(s) 16, 19-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-11 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/25/05.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 12-15 and, 17-18 rejected under 35 U.S.C. 102(b) as being anticipated by Chan et al.

Chan discloses an LGA interconnect (fig. 2), for interconnection to further electrical components, said LGA interconnect comprising: a substrate (36 or 36a) having an array of contact receiving openings (37) therein, and the substrate having a receiving aperture (38), the receiving aperture having a receiving portion which transitions into a locking portion (38a), a plurality of contact assemblies (22 or 26 and 34 or 35) positioned and retained in said substrate (fig. 4); a frame housing

(fig. 6) positioned around a periphery of said substrate (fig. 1B); alignment members (78) projecting from said substrate (fig. 3), and extending through said frame housing, for aligning said substrate relative to at least one of the electrical components, the alignment members being insertable into said receiving opening and locked in place in said locking portion (figures 3 & 4).

Regarding claim 13 Chan discloses that the alignment members are comprised of pins (fig. 1B).

Regarding claim 14 Chan discloses that said pins are attached at diametrically opposite positions of said substrate (fig. 1B).

Regarding claim 15 Chan discloses that said frame housing can laterally float relative to said pins (elongate opening at 38a).

Regarding claim 17 Chan discloses that said pin is substantially cylindrical (fig. 1B).

Regarding claim 18 Chan discloses that said receiving portion and locking portion are substantially circular (fig. 1B 38 & 38a).

Response to Arguments

4. Applicant's arguments filed 8/25/05 have been fully considered but they are not persuasive.

**See the final office action argument for copending application
10/789043.**

Examiner has clarified in the rejection above that the substrate is **either** component 36 or 36a.

In response to the applicant's argument that Chan includes additional structure not required by the applicant's invention, it must be noted that Chan discloses the invention **as claimed**. The fact that it discloses additional structure not claimed is irrelevant.

Chan discloses contact **assemblies** (either 22 or 26 with 34 & 35) positioned and retained in a substrate (either 36 or 36a), see figure 4.

Allowable Subject Matter

5. Claims 16, 19-26 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. Reasons for allowance were given in the previous office action.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Patents and applications listed in the accompanying PTO-892 show substrates with alignment devices for an LGA application. See especially McHugh et al.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Zarroli whose telephone number is 571-272-2101. The examiner can normally be reached on 7:30 to 3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, T.C. Patel can be reached on (571) 272-2800 ext 39. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read "Michael C. Zarroli". The signature is fluid and cursive, with the first name "Michael" and last name "Zarroli" clearly distinguishable.

Michael C. Zarroli

Primary Examiner

Art Unit 2839

MCZ

MCZ